1 C1/2

1. (Amended) A method for generating faster discrete cosine transforms, comprising:

arranging discrete cosine transform equations into at least one collection of at least two discrete transform equations, wherein the collection includes at least two discrete cosine transform constants;

scaling the discrete cosine transform equations in the at least one collection by dividing each of the discrete cosine transform constants in the collection by one of the discrete cosine transform constants from the at least one collection; and

representing each of the scaled discrete cosine transform constants with sums of powers-of-2 that are approximations for the scaled discrete cosine transform constants.

Work

system comprising a discrete cosine transformer for applying a discrete cosine transform to decorrelate data into discrete cosine transform equations, the discrete cosine transform equations having been formed by arranging the discrete cosine transform equations into at least one collection of at least two discrete transform equations, wherein the collection includes at least two discrete cosine transform constants, scaling the discrete cosine transform equations in the at least one collection by dividing each of the discrete cosine transform constants in the collection by one of the discrete cosine transform constants from the at least one collection and representing each of the scaled discrete cosine transform constants with sums of powers-of-2 that are approximations for the scaled discrete cosine transform constants.

3302

5

7

8

9

10

13

14

15

16

25. (Amended) A printer, comprising:

a memory for storing data;

a processor for processing the data to provide a compressed print stream

4 output; and

a printhead driving circuit for controlling a printhead to generate a printout of

6 the data;

wherein the processor applies a discrete cosine transform to decorrelate data into transform coefficients using discrete cosine equations, the discrete cosine transform equations having been formed by arranging the discrete cosine transform equations into at least one collection of at least two discrete transform equations,

11 wherein the collection includes at least two discrete cosine transform constants,

scaling the discrete cosine transform equations in the at least one collection by

dividing each of the discrete cosine transform constants in the collection by one of

the discrete cosine transform constants from the at least one collection and

representing each of the scaled discrete cosine transform constants with sums of

powers-of-2 that are approximations for the scaled discrete cosine transform

17 constants.

1	36. (Amended) An article of manufacture comprising a program storage
2	medium readable by a computer, the medium tangibly embodying one or more
3	programs of instructions executable by the computer to use equations created by a
4	method for generating faster discrete cosine transforms, the method comprising:
5	arranging discrete cosine transform equations into at least one collection of at
6	least two discrete transform equations, wherein the collection includes at least two
7	discrete cosine transform constants;
8	scaling the discrete cosine transform equations in the at least one collection
9	by dividing each of the discrete cosine transform constants in the collection by one
10	of the discrete cosine transform constants from the at least one collection; and
11	representing each of the scaled discrete cosine transform constants with
12	sums of powers-of-2 that are approximations for the scaled discrete cosine
13	transform constants.

(Amended Twice) A data analysis system, comprising; 47. a memory for storing discrete cosine transform equations having been formed by arranging discrete cosine transform equations into at least one collection of at 3 least two discrete transform equations, wherein the collection includes at least two 4 discrete cosine transform constants, scaling the discrete cosine transform equations 5 in the at least one collection by dividing each of the discrete cosine transform 6 constants in the collection by one of the discrete cosine transform constants from the 7 at least one collection and representing each of the scaled discrete cosine transform 8 constants with sums of powers-of-2 that are approximations for the scaled discrete 9 10 cosine transform constants; and a transformer for applying the transform equations to perform a discrete 11

cosine transform to decorrelate data into discrete cosine transform coefficients.

12